Drug developers have directed almost half of their dealmaking firepower at oncology projects over the past five years, with cardiovascular a distant second.

The domination of cancer research above all other diseases is well appreciated. A new analysis of where the deal money is being deployed shows the extent of biopharma’s preoccupation.

Almost half of the cash spent by drug developers on company acquisitions and licensing deals has been directed at oncology over the past five years – a sum of around $120bn, 41% of the total deployed, according to a Vantage analysis of EvaluatePharma data. This excludes M&A deals targeting several therapy areas, like Celgene, so the real figure is likely to be larger.

The cardiovascular space has seen the second-biggest spend, though two substantial deals skewed the figures here: Johnson & Johnson’s $30bn takeout of Actelion and Novartis’s more recent move on The Medicines Company, for almost $10bn. These transactions were left in the analysis as they were pure therapy area plays – and of course removing them only increases cancer’s proportional take.
This analysis has been constructed from all M&A transactions with a clear primary therapy focus. Where an up-front fee was paid, this was used rather than the total deal value.

To give a more complete look at the sector's spending, Vantage also counted licensing deals, though only those with a disclosed up-front value. These were assigned based on the therapy focus of the lead project.

It is important to remember that the cancer and cardiovascular fields are vast compared with areas like dermatology or sensory organs, and they can be expected to attract larger sums of money. Still, those working in infectious diseases, for example, would argue that the distribution of wealth has not always followed need.

After a dip in 2017 and 2018 the sums spent on oncology projects surged again last year. Deal-making activity between drug makers overall has been dimming since the biotech boom of 2015, as previously described by Vantage for M&A and licensing deals alike, a trend that has partly been driven by easy access to financing, which has lessened the need for smaller developers to sell up.

At the same time, however, cancer's share of the cash deployed has hovered around 50%, the chart below shows, surging to 60% last year, driven by the multi-billion takeouts of Array for $11.4bn, Loxo for $8bn and Arqule for $2.7bn.
Other areas that stand out above include cardiovascular, with the peaks representing the deals mentioned previously. Neurology has also seen big transactions; this area includes all central nervous system-related indications like psychiatry and dementia, with the 2018 peak driven by Novartis’s acquisition of Avexis.

A similar story emerges when looking at a count of deals happening, below, first on a proportional basis, and then by actual numbers.

Outside the ever dominant cancer space, it is interesting to see that biopharma’s interest in neurology has remained constant, at around 14% of all deals announced since 2015. This is notable considering the exit of several big pharma groups from this space.

The miscellaneous group can also be seen emerging in the chart below; this contains a lot of rare disease projects that do not easily fit into traditional therapy areas.
Looking at the actual number of deals, again the dip in activity across all therapy areas since 2015 is evident. Fields that seem to have registered bigger underlying declines can be identified, however, and here infectious diseases stands out, with only nine deals last year, down from 24 in 2015. The commercial difficulties that antibiotic makers are encountering is perhaps one explanation.

Whether this huge investment in cancer has been worth it commercially, and driven commensurate improvements in patients’ lives, are other questions entirely, of course; the ability of companies to charge premium prices for such therapies has been a big pull factor. And while real progress has been made in certain areas some fields, like immuno-oncology, have not advanced as many had hoped.

These analyses suggest that the sector remains fully committed to oncology, though it is also clear that considerably less competitive sectors can be found.

*This is an updated story that has been corrected to include several 2019 deals that were missing from a previous analysis.*